

## FIG.1

CONTROL DATA

USER DATA

- 110 CONTROL CH TRANSMISSION SECTION
- 5 120 USER CH TRANSMISSION SECTION
- 250 FB INFORMATION RECEPTION SECTION
- 130 MULTIPLEXING SECTION
- 140 S/P CONVERSION SECTION
- 150 IFFT SECTION
- 10 160 GI INSERTION SECTION
- 170 RADIO TRANSMISSION SECTION
- 270 FBSC DETERMINING SECTION
- 260 PL SIGNAL RECEPTION SECTION
- 240 P/S CONVERSION SECTION
- 15 230 FFT SECTION
- 220 GI ELIMINATION SECTION
- 210 RADIO RECEPTION SECTION

## FIG.2

- 20 CONTROL DATA
- 111 CODING SECTION
- 112 MODULATION SECTION
- TO MULTIPLEXING SECTION
- 130 USER DATA
- 25 120 USER CH TRANSMISSION SECTION
- TO MULTIPLEXING SECTION 130
- 250 FB INFORMATION RECEPTION SECTION

FROM FFT SECTION 230

270 FBSC DETERMINING SECTION

262 RECEPTION QUALITY MEASURING SECTION

261 PL SIGNAL EXTRACTION SECTION

5 FROM P/S CONVERSION SECTION 240

FIG.3

CONTROL DATA

110 CONTROL CH TRANSMISSION SECTION

10 TO MULTIPLEXING SECTION 130

USER DATA

121 CODING SECTION

122 RETRANSMISSION CONTROL SECTION

123 MODULATION SECTION

15 TO MULTIPLEXING SECTION 130

124 MCS DETERMINING SECTION

253 DECODING SECTION

252 DEMODULATION SECTION

251 FB INFORMATION EXTRACTION SECTION

20 FROM FFT SECTION 230

270 FBSC DETERMINING SECTION

260 PL SIGNAL RECEPTION SECTION

FROM P/S CONVERSION SECTION 240

25 FIG.4

310 RADIO RECEPTION SECTION

320 GI ELIMINATION SECTION

330 FFT SECTION  
340 P/S CONVERSION SECTION  
350 CONTROL CH RECEPTION SECTION  
360 USER CH RECEPTION SECTION  
5 370 PL SIGNAL RECEPTION SECTION CONTROL DATA USER DATA  
470 RADIO TRANSMISSION SECTION  
460 GI INSERTION SECTION  
450 IFFT SECTION  
440 S/P CONVERSION SECTION  
10 430 SC ASSIGNMENT SECTION  
420 MULTIPLEXING SECTION  
410 FB INFORMATION TRANSMISSION SECTION

## FIG.5

15 351 CONTROL INFORMATION EXTRACTION SECTION  
352 DEMODULATION SECTION  
353 DECODING SECTION  
CONTROL DATA  
FROM P/S CONVERSION SECTION 340  
20 361 USER INFORMATION EXTRACTION SECTION  
362 DEMODULATION SECTION  
363 DECODING SECTION  
364 ERROR DETECTION SECTION USER DATA  
371 PL SIGNAL EXTRACTION SECTION  
25 372 RECEPTION QUALITY MEASURING SECTION  
430 SC ASSIGNMENT SECTION 420 MULTIPLEXING SECTION  
415 MODULATION SECTION

413 CODING SECTION 411 CQI GENERATION SECTION  
416 MODULATION SECTION  
414 CODING SECTION  
412 ACK/NACK GENERATION SECTION

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FIG.6 FREQUENCY SELECTIVE FADING  
FREQUENCY

FIG.7

10 BASE STATION APPARATUS  
MOBILE STATION APPARATUS  
CONTROL DATA  
USER DATA  
FBSC INFORMATION FEEDBACK INFORMATION

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FIG.8  
CONTROL DATA 1  
CONTROL DATA 2  
USER DATA 1

20 USER DATA 2

110 CONTROL CH TRANSMISSION SECTION  
120 USER CH TRANSMISSION SECTION  
130 MULTIPLEXING SECTION  
140 S/P CONVERSION SECTION

25 150 IFFT SECTION

160 GI INSERTION SECTION  
170 RADIO TRANSMISSION SECTION

500 DATA AMOUNT MEASURING SECTION

270a FBSC DETERMINING SECTION

250 FB INFORMATION RECEPTION SECTION

260 PL SIGNAL RECEPTION SECTION

5 240 P/S CONVERSION SECTION

230 FFT SECTION

220 GI ELIMINATION SECTION

210 RADIO RECEPTION SECTION

10 FIG.9

START

ST1000 RANK N MOBILE STATION APPARATUSES ACCORDING TO  
AMOUNT OF DATA

ST1300 SEARCH jTH BEST SUBCARRIER OF MOBILE STATION

15 APPARATUS i

ST1400 ALREADY ASSIGNED TO OTHER MOBILE STATION  
APPARATUS

ST1500 ASSIGN SUBCARRIER TO MOBILE STATION APPARATUS  
END

20

FIG.10

CONTROL DATA #1

CONTROL DATA #2

USER DATA #1

25 USER DATA #2

110 CONTROL CH TRANSMISSION SECTION

120 USER CH TRANSMISSION SECTION

	130	MULTIPLEXING SECTION
	140	S/P CONVERSION SECTION
	150	IFFT SECTION
	160	GI INSERTION SECTION
5	170	RADIO TRANSMISSION SECTION
	600	TRANSMIT POWER INFORMATION GENERAITON SECTION
	500	DATA AMOUNT MEASURING SECTION
	270a	FBSC DETERMINING SECTION
	250	FB INFORMATION RECEPTION SECTION
10	260	PL SIGNAL RECEPTION SECTION
	240	P/S CONVERSION SECTION
	230	FFT SECTION
	220	GI ELIMINATION SECTION
	210	RADIO RECEPTION SECTION
15		
		FIG.11
	310	RADIO RECEPTION SECTION
	320	GI ELIMINATION SECTION
	330	FFT SECTION
20	340	P/S CONVERSION SECTION
	350	CONTROL CH RECEPTION SECTION
	360	USER CH RECEPTION SECTION
	370	PL SIGNAL RECEPTION SECTION CONTROL DATA USER DATA
	470	RADIO TRANSMISSION SECTION
25	460	GI INSERTION SECTION
	450	IFFT SECTION
	440	S/P CONVERSION SECTION

700 TRANSMIT POWER SETTING SECTION  
430 SC ASSIGNMENT SECTION  
420 MULTIPLEXING SECTION  
410 FB INFORMATION TRANSMISSION SECTION

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FIG.12

CONTROL DATA

USER DATA

110 CONTROL CH TRANSMISSION SECTION  
10 120 USER CH TRANSMISSION SECTION  
130 MULTIPLEXING SECTION  
140 S/P CONVERSION SECTION  
150 IFFT SECTION  
160 GI INSERTION SECTION  
15 170 RADIO TRANSMISSION SECTION  
250 FB INFORMATION RECEPTION SECTION  
810 SC DECISION SECTION  
800 DESPREADING SECTION  
230 FFT SECTION  
20 220 GI ELIMINATION SECTION  
210 RADIO RECEPTION SECTION

FIG.13

310 RADIO RECEPTION SECTION  
25 320 GI ELIMINATION SECTION  
330 FFT SECTION  
340 P/S CONVERSION SECTION

350 CONTROL CH RECEPTION SECTION

360 USER CH RECEPTION SECTION

370 PL SIGNAL RECEPTION SECTION

CONTROL DATA

5 USER DATA

470 RADIO TRANSMISSION SECTION

460 GI INSERTION SECTION

450 IFFT SECTION

910 SPREADING SECTION

10 440 S/P CONVERSION SECTION

430a SC ASSIGNMENT SECTION

420 MULTIPLEXING SECTION

410 FB INFORMATION TRANSMISSION SECTION

900 FBSC SELECTION SECTION

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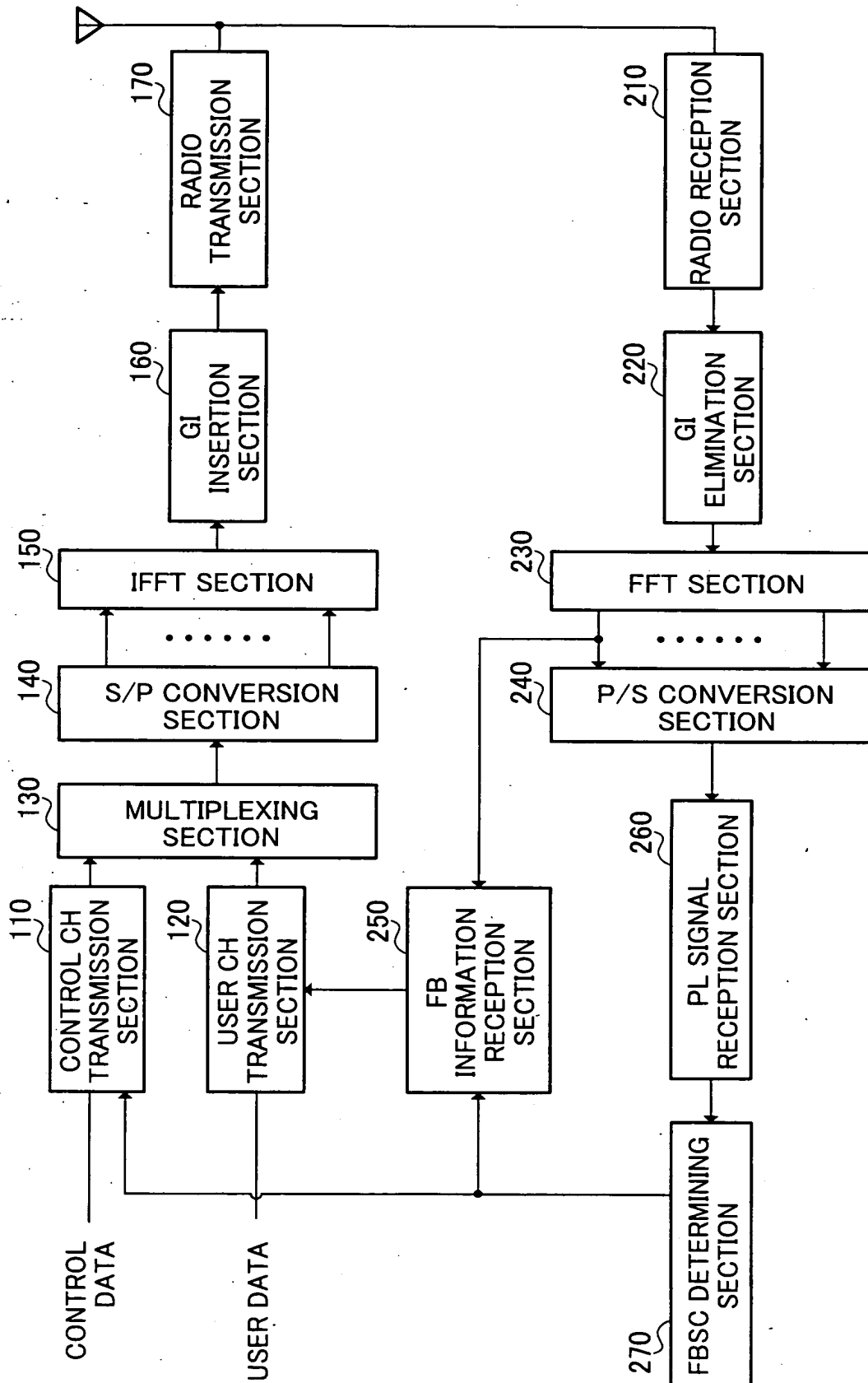


FIG. 1

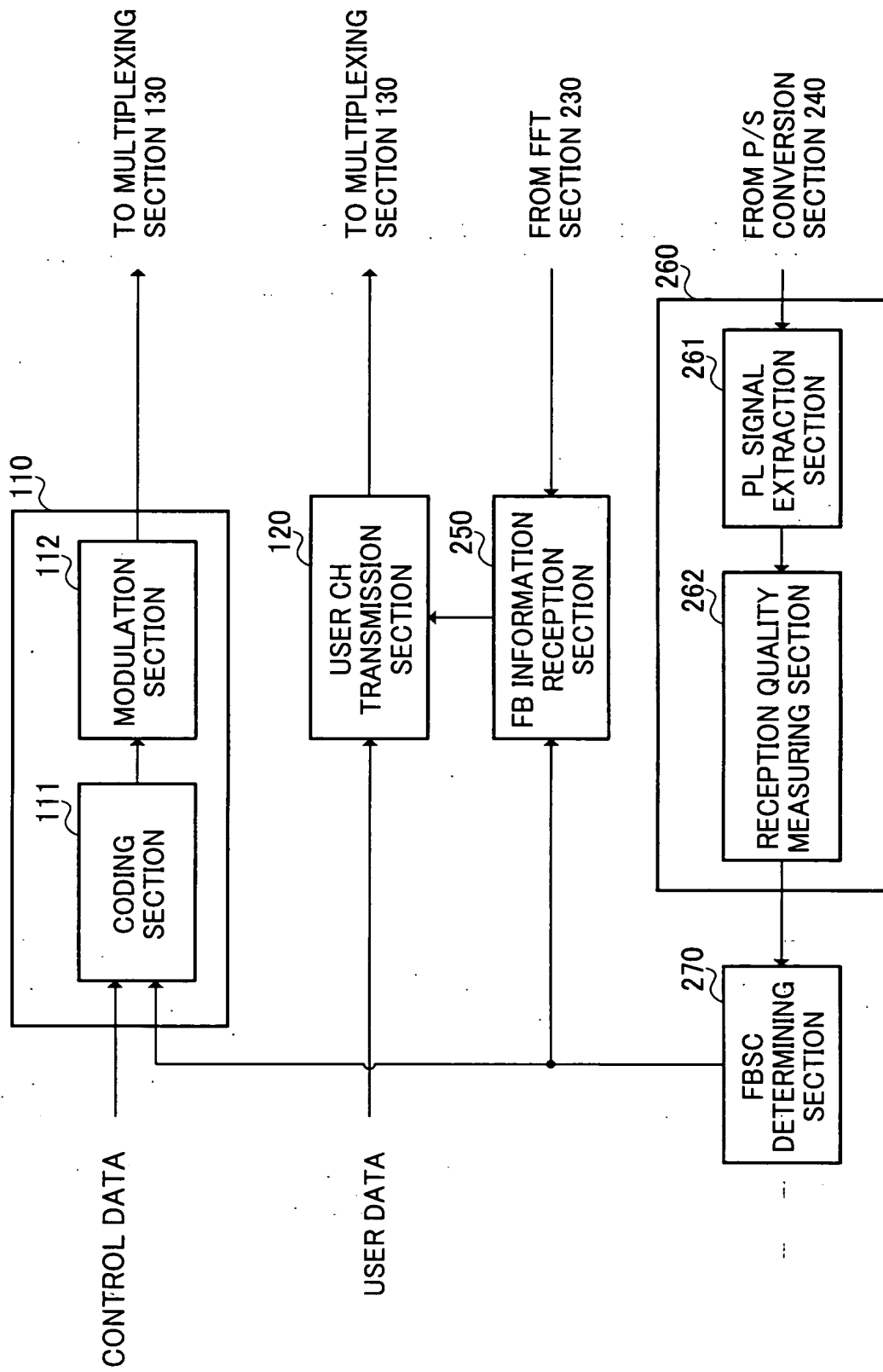


FIG.2

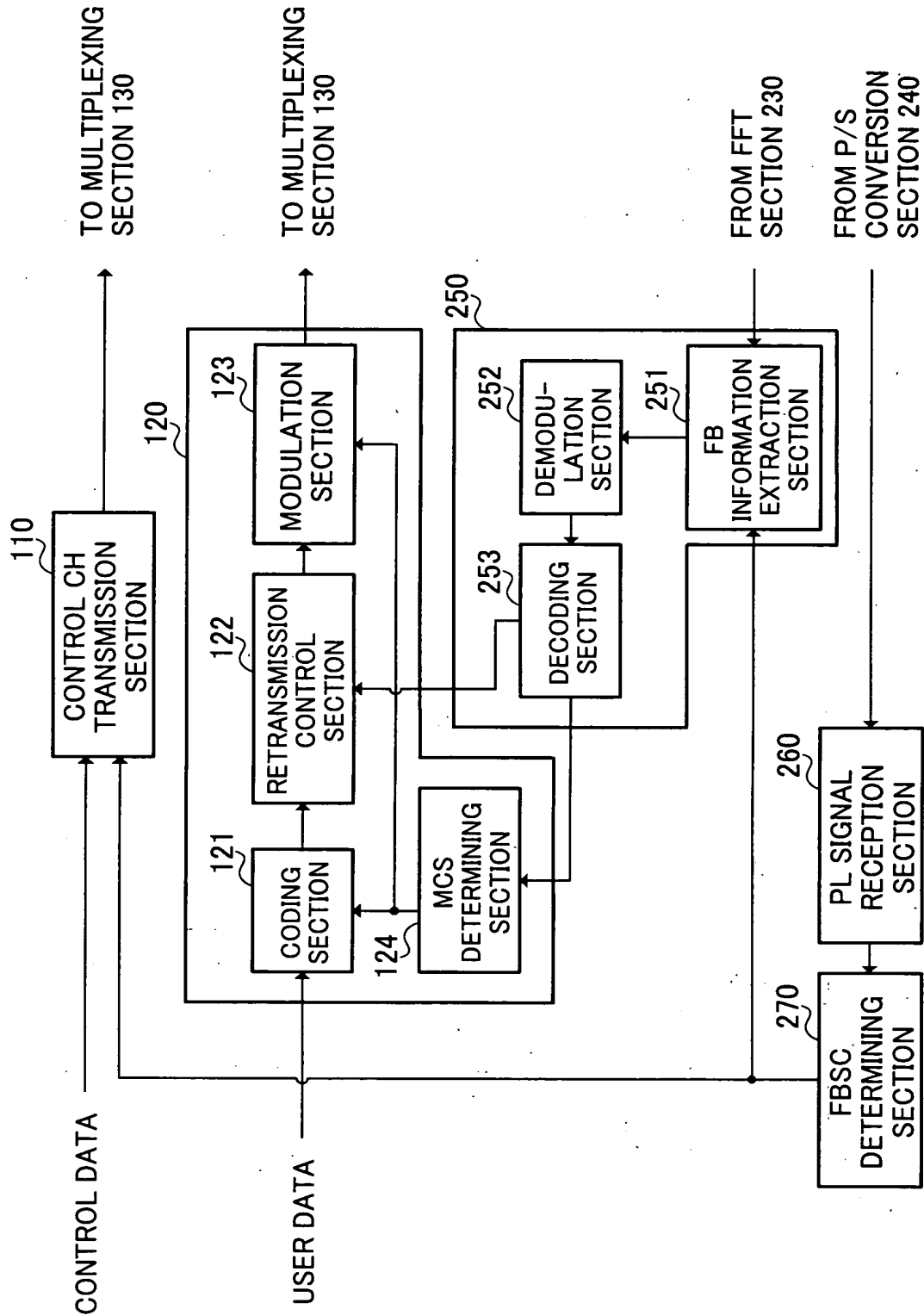


FIG.3

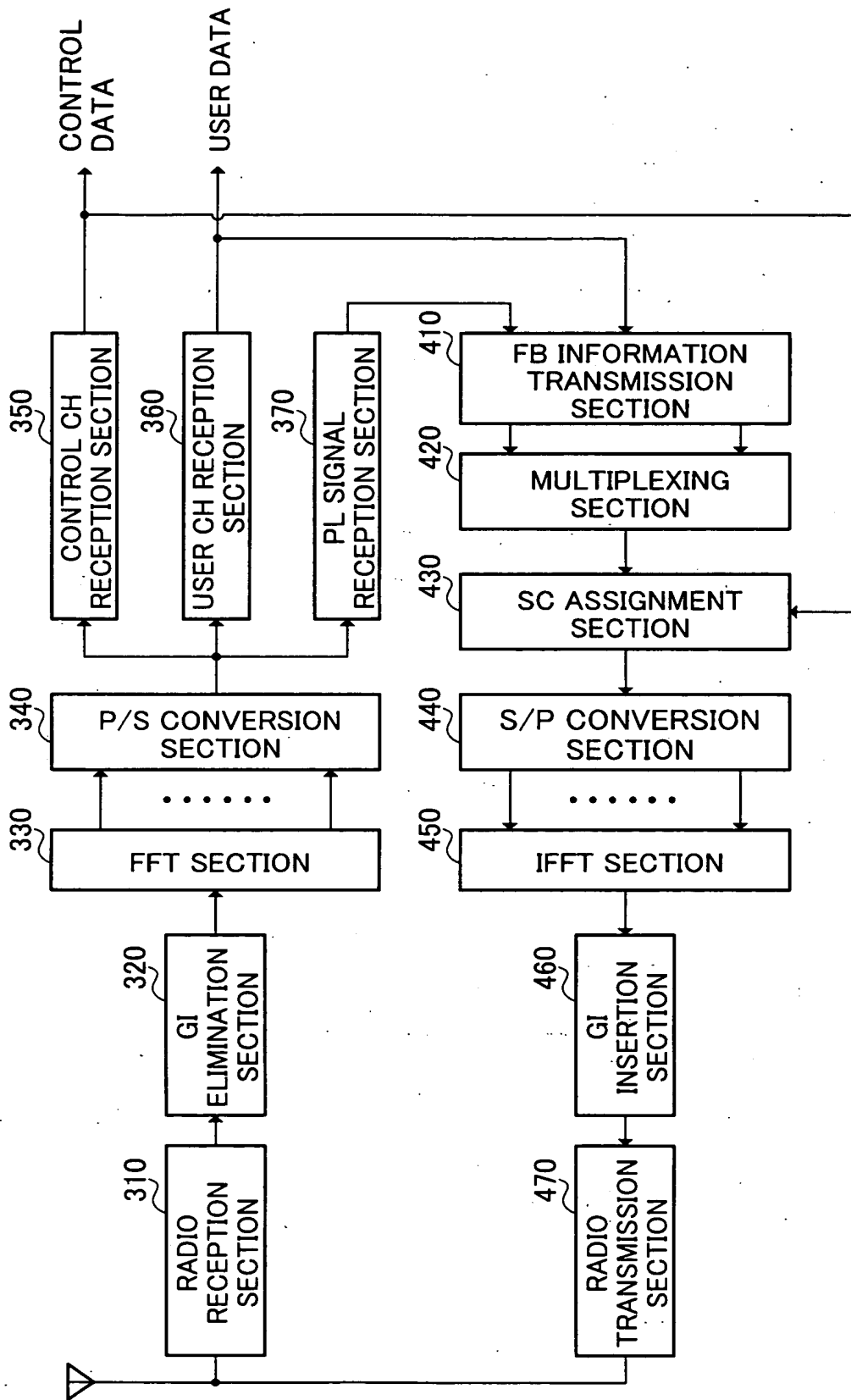


FIG.4

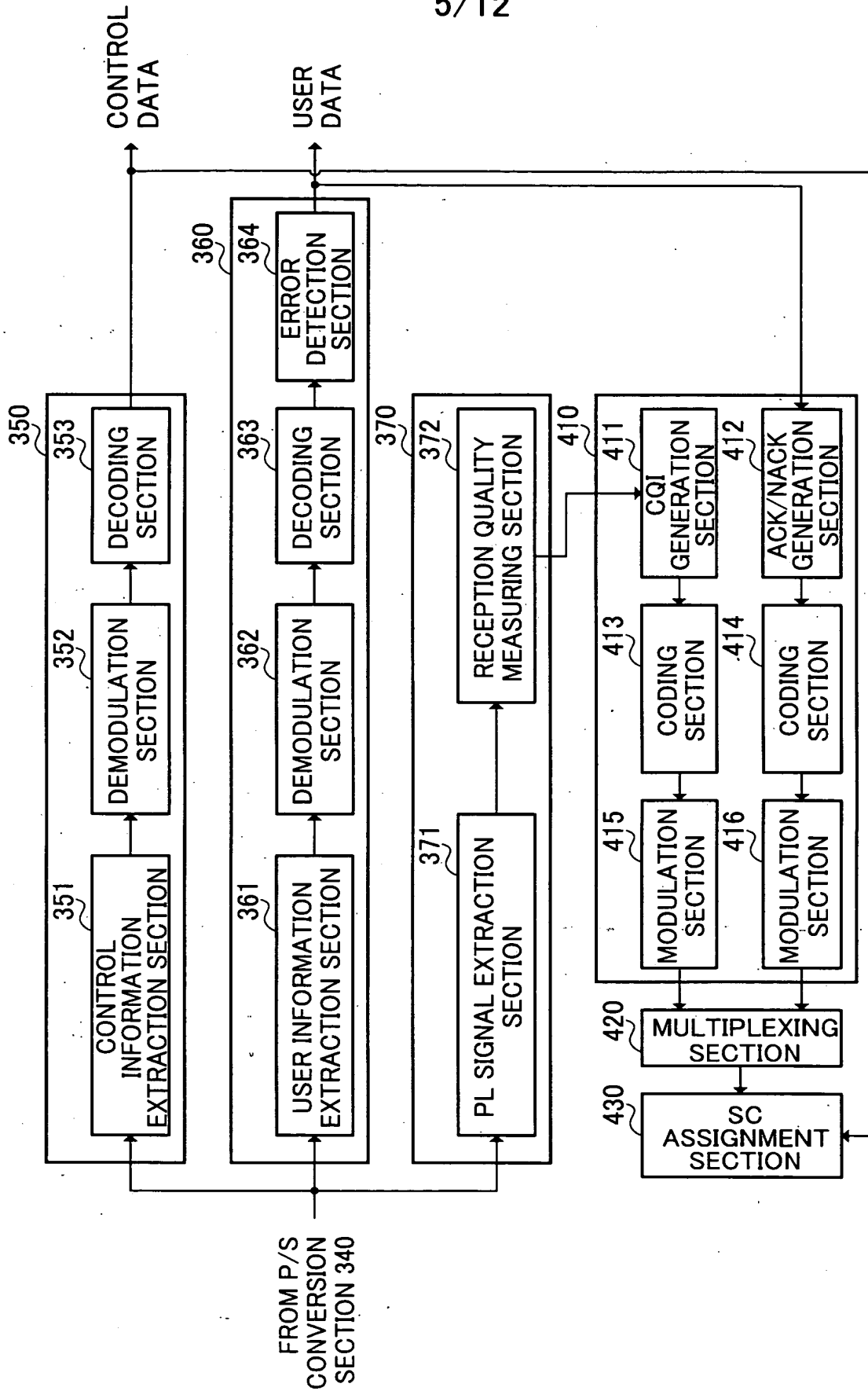


FIG. 5

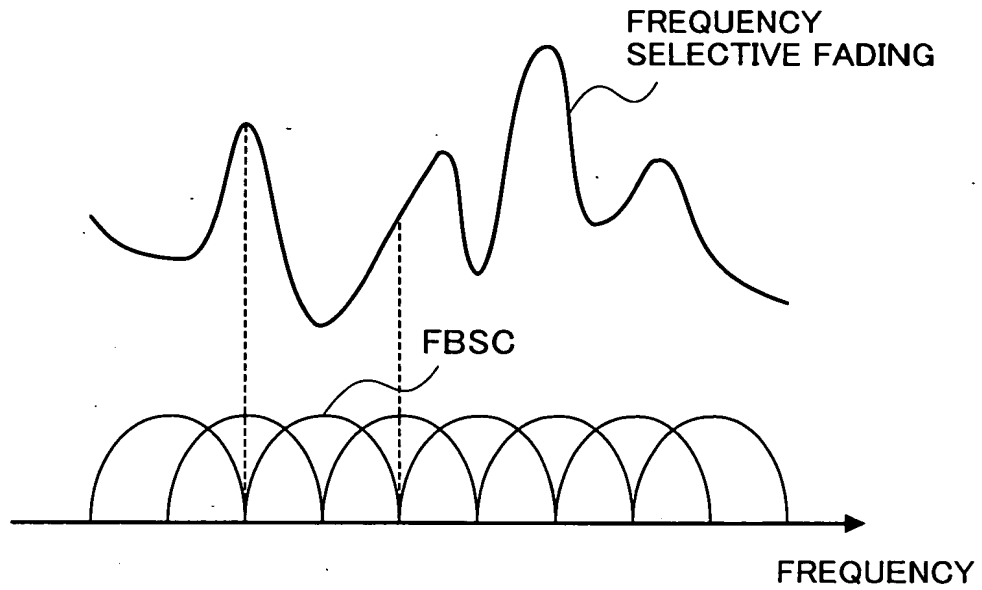


FIG.6

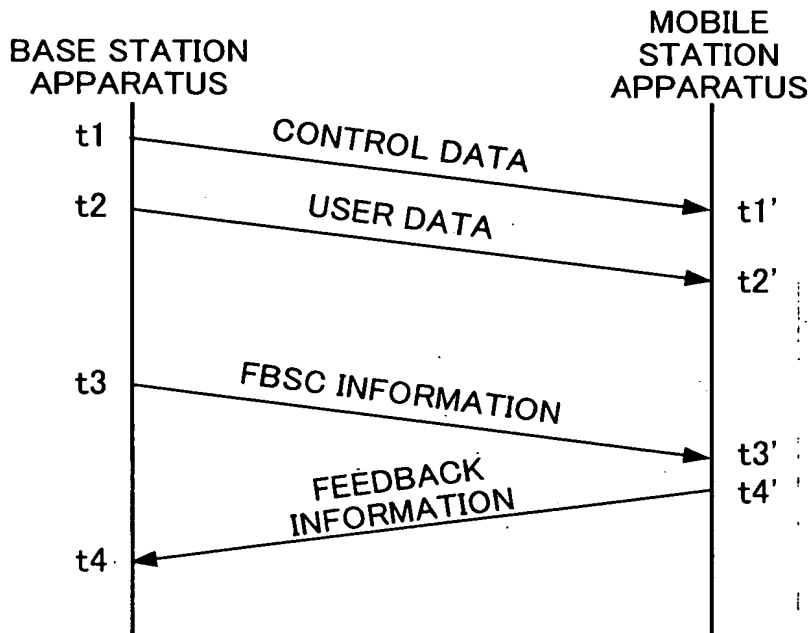


FIG.7

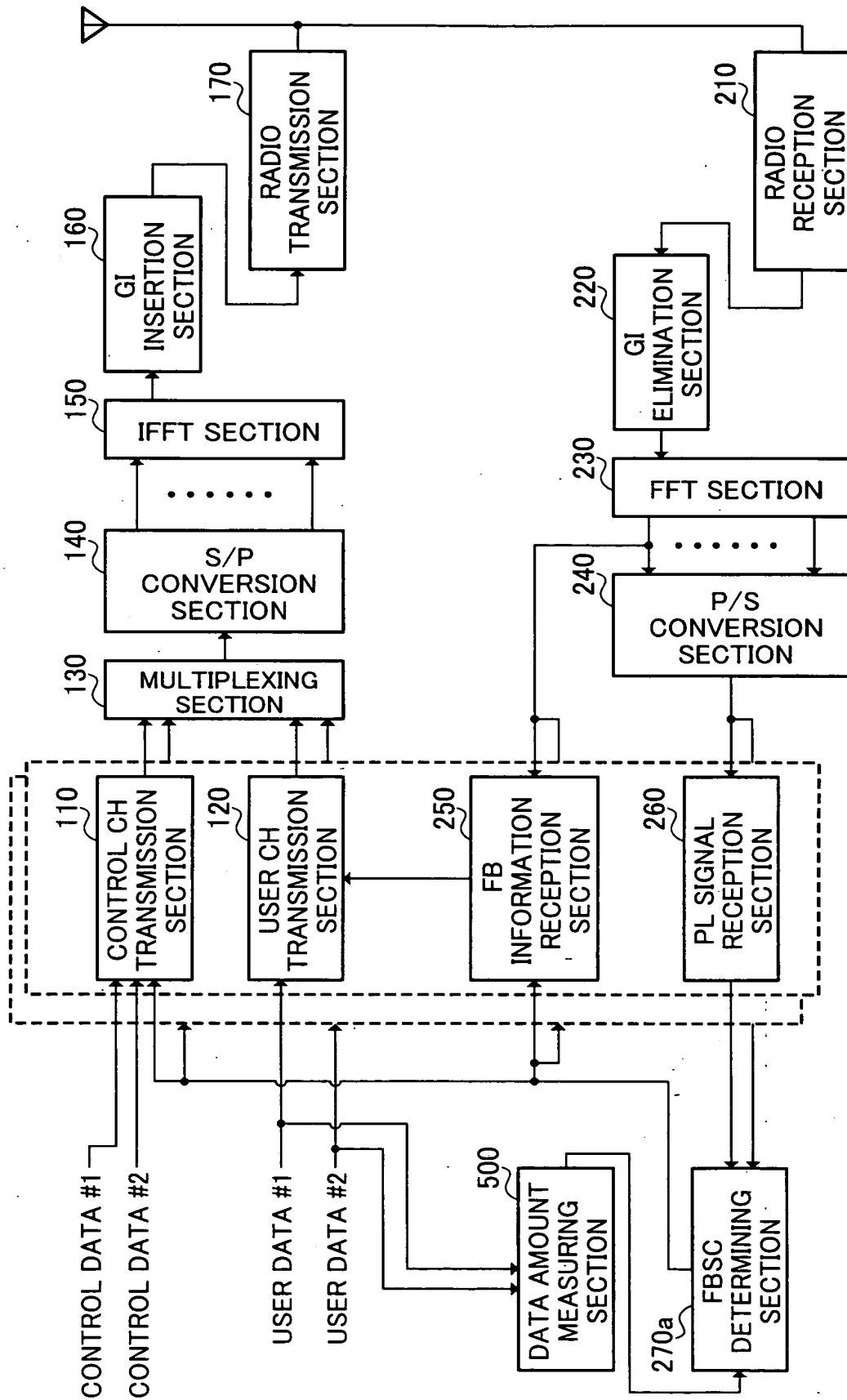


FIG.8

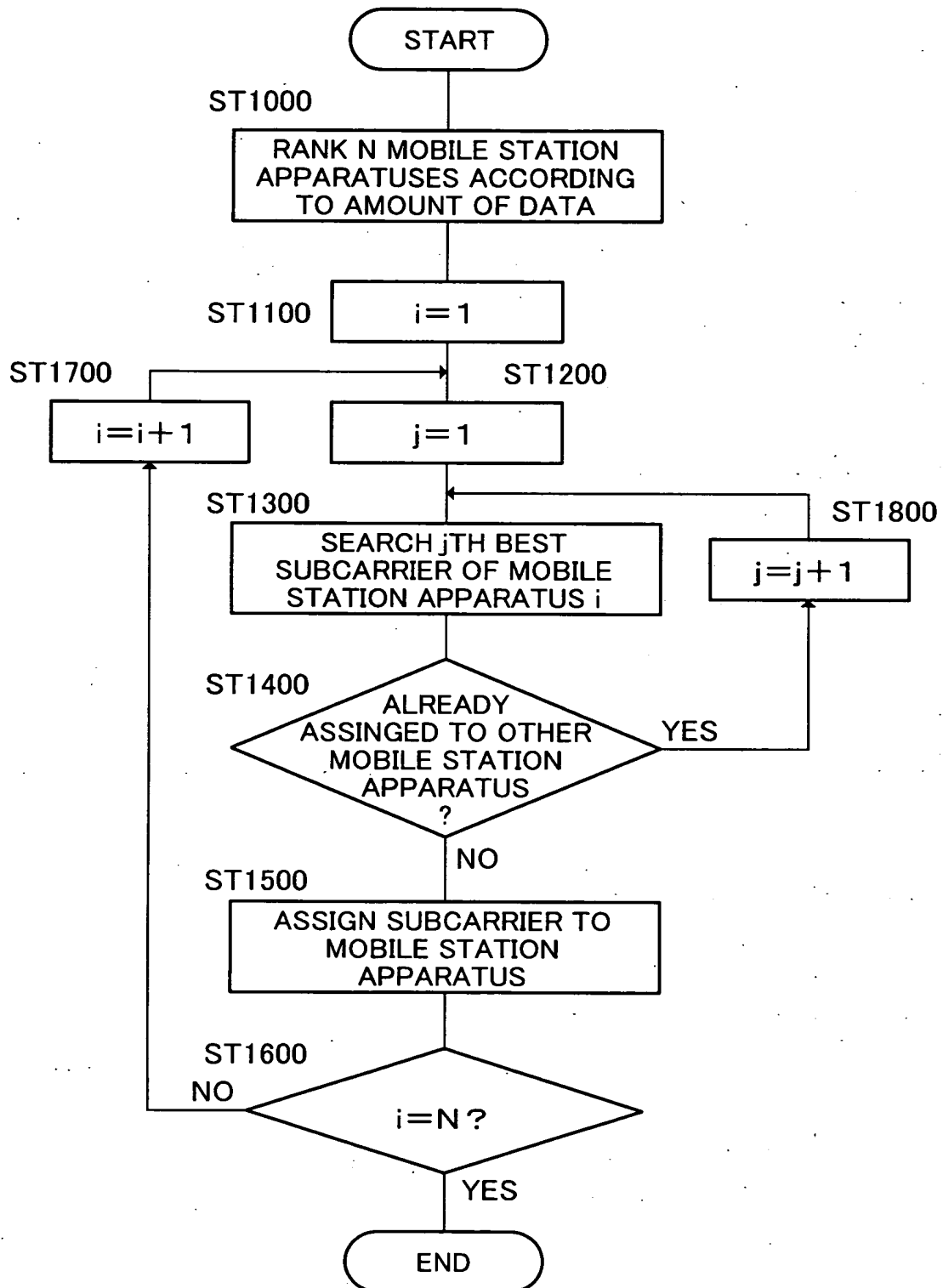


FIG.9



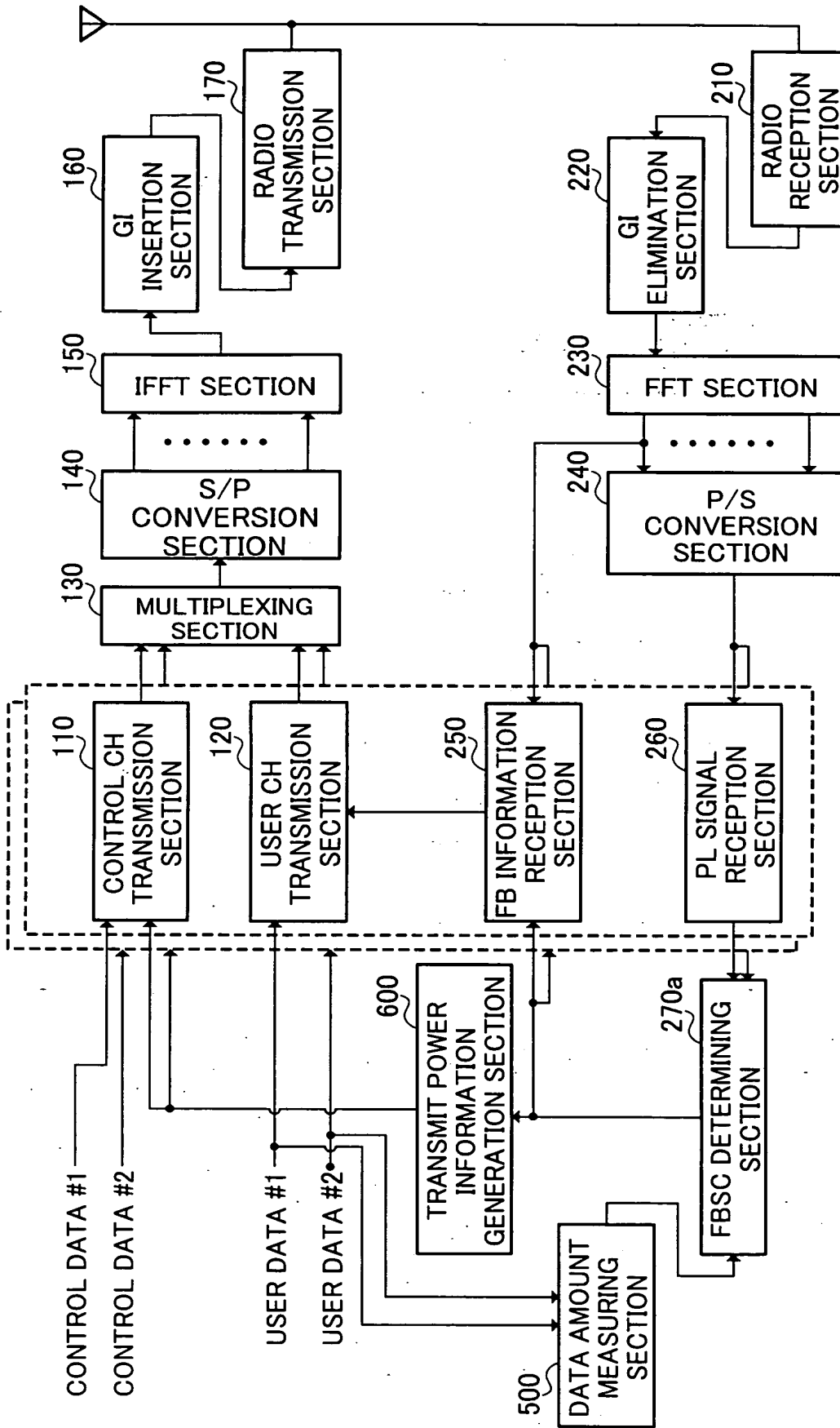
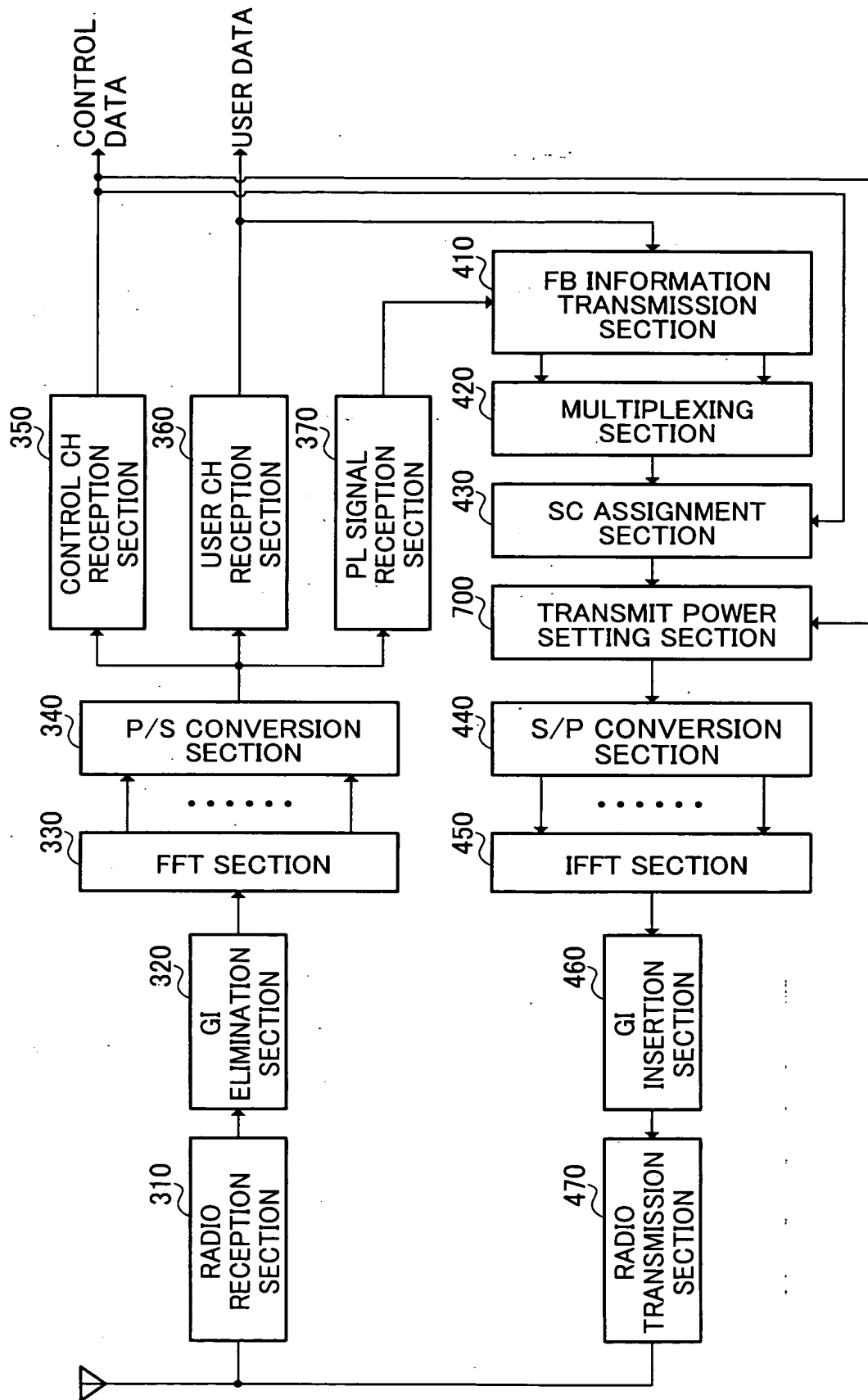


FIG.10



**FIG.11**

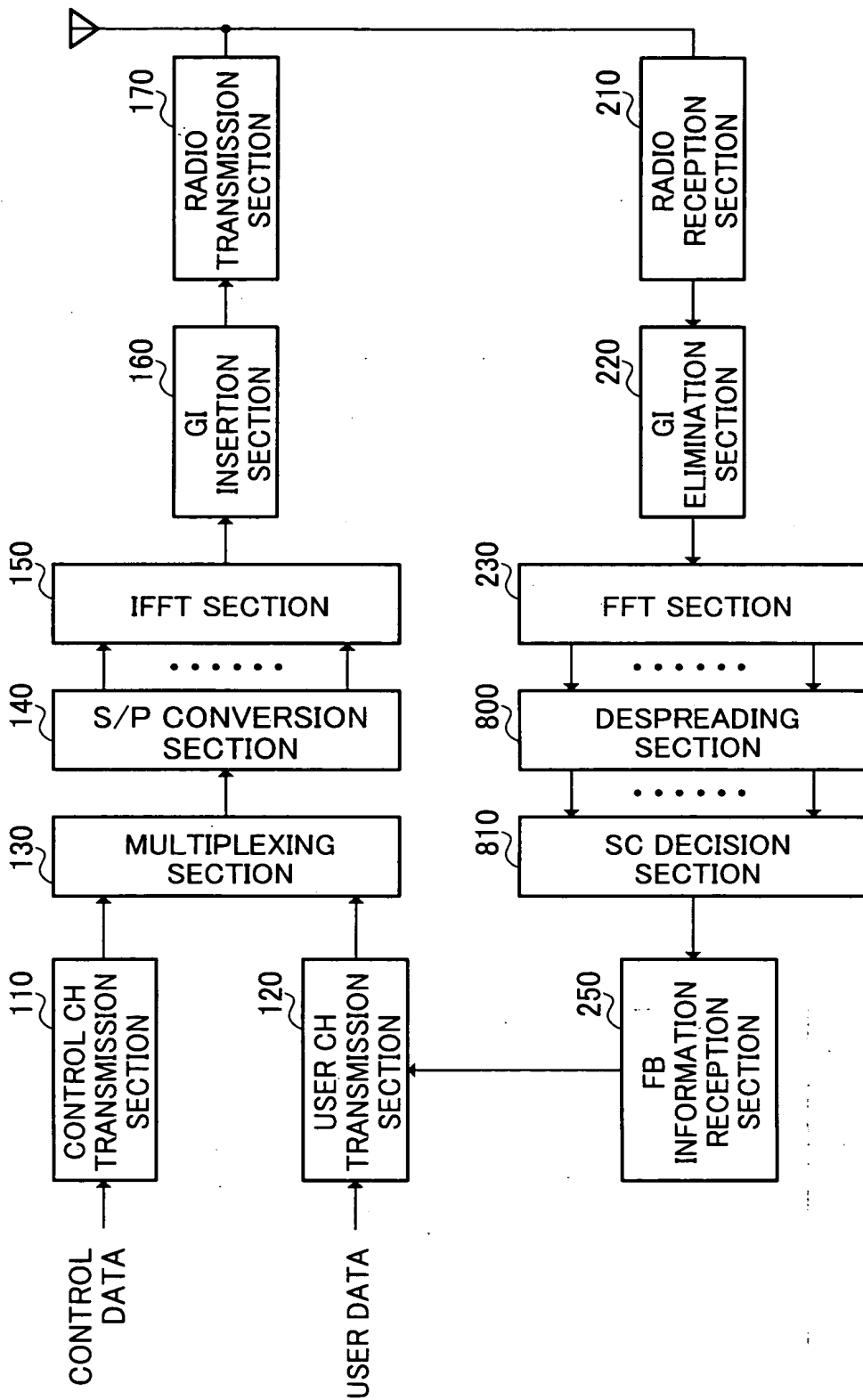


FIG.12

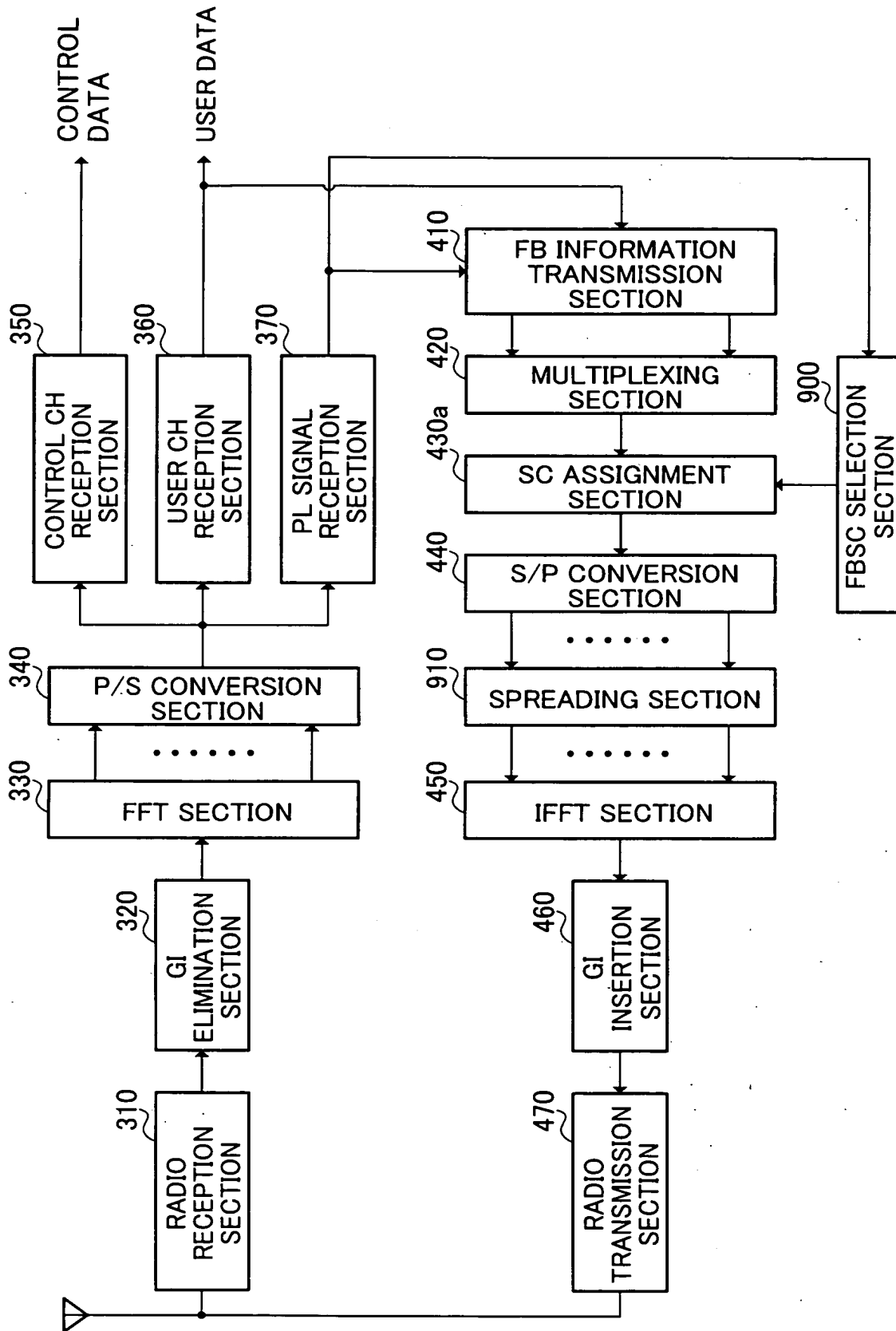


FIG.13